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Washington, D.C. 20005

Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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SEPTEMBER 1987

SUMMARY

A 3.7 percent rise in September deliveries brought the third quarter increase to 2.6 percent, with growth in gasoline, distillate, and "other oils" deliveries the main contributors to the quarter's rise. For the quarter, increases in miles travelled helped gasoline deliveries to continue to grow at over 2 percent, while distillate deliveries' increase contrasted with the first half's slight decline. Residual fuel oil continued to decline versus last year, and kerosine jet fuel's lesser growth for the quarter reflected slower air traffic increases versus earlier in the year.

Drilling and well servicing, though experiencing some recovery in recent months, have been well below levels needed to slow the decline in domestic production; third quarter crude oil production fell to less than 8.2 million B/D, 1 million B/D below the level of early 1986. September's imports, though edging down from previous months' recent-year highs, still contributed to the highest quarterly imports since 1980. Paralleling crude oil imports, refinery input dropped slightly in September from previous months, but still exceeded that of last September by close to 1 percent. Total inventories rose about 15 million barrels during the month, in line with typical patterns but contrasting with a recent above-normal increase.

PRODUCT SUPPLIED [1/]

Gasoline

DEMAND CONTINUES TO RISE DESPITE SLOW INCOME GROWTH. Counterbalancing August's weak performance, gasoline deliveries in September rose over 4 percent year to year. For the quarter as a whole, deliveries have risen 2.3 percent, about in line with consumption growth as indicated by increases in miles travelled when offset by improvements in the fleet's average fuel efficiency. This continued growth comes despite weakening in income gains this year. The year-to-year rise in real disposable income for the third quarter is estimated to be only about half a percent, and not much more than that for the year to date, in contrast with a 4 percent gain for last year as a whole. That gasoline deliveries' growth rate has slackened only slightly from last year's average 3 percent rate can be attributed to the continued impact of prices still roughly one fourth lower than two years ago, before last year's major price decline.

After rising for much of the year, retail prices declined slightly from August's levels due partly to a decline in crude oil prices and partly to normal seasonal patterns. Even so, the 11 to 12 cent-per-gallon increase since last September is somewhat less than the increase in refiner's crude oil costs, estimated at about 14 cents per gallon.

Distillates

THIRD QUARTER'S INCREASE CONTRASTS WITH FIRST HALF. Third quarter distillate deliveries rose 5.4 percent versus a year ago, primarily because of September's unusually large rise of nearly 11 percent. Part of September's strong increase is actually the result of year-ago deliveries which were roughly 100 thousand B/D below trend, as some distributors and end users apparently chose to rely on supplies purchased earlier. Even after adjusting for this, this September's deliveries were higher than indicated by consumption trends, and the quarter's growth rate would still work out to about 4 percent — in contrast with a slight decline in the first half of this year and about twice the estimated increase in actual consumption for the quarter.

Some revival in transportation usage may be aiding this growth. Truck traffic, after rising only about 1 percent year to year in the first half of 1987, has been running about 5 percent ahead during the third quarter. Rail traffic growth, too, has risen from less than 3 percent in the first half to about 9 percent for the most recent three months, with increases in grain and coal shipments contributing to the rise. Together these sectors may have added 60 to 80 thousand B/D to distillate deliveries during the third quarter.

The farm sector's partially-offsetting decline may be less than implied by the 7 percent drop in acreage this year; major

API ESTIMATES

	SEPTEMBER		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.5	3.7	16.5	2.1
Crude oil production[2/]	8.1	(2.9)	8.3	(5.6)
Total imports[3/]	6.9	(1.6)	6.4	5.3
Stocks (million bbl)[3/]	1,069	(3.9)	na	na

crop production is estimated to be down only about 2 percent as a result of more intensive farming of the remaining acreage and the vagaries of weather. The decline in farm use, combined with weakening off-highway use and small volume changes for other sectors, may have brought total distillate consumption growth in the third quarter down to about 2 percent. That year-to-date deliveries have risen about 2 percentage points less than the 7 percent increase for miles flown is at least partially explained by continued additions to the fleet of new, more fuel-efficient aircraft, which have recently been raising fleet efficiency by about one percent per year.

Residual Fuel Oil

ELECTRIC UTILITY USE CONTINUES DROP VERSUS LAST YEAR.

Residual fuel oil deliveries fell 13.1 percent for the third quarter and 11 percent for September, continuing this year's reversal of last year's price-induced switching to residual fuel oil. The decline came despite unusually hot weather early in the quarter in regions of the East where much of the electric utility sector's residual fuel oil consumption takes place.

As with last year's rise in deliveries, the bulk of this year's decline is accounted for by electric utilities. For the first half, while petroleum's already-small share of energy input to utilities fell to less than 5 percent, nuclear generation rose nearly 13 percent to gain over a point-and-a-half in its share of generation, which now is nearly 18 percent. Increases in natural gas and coal usage slightly exceeded the 3 percent growth in total generation, while hydropower output was reduced.

Kerosine Jet Fuel

LOWER TRAFFIC GROWTH SLOWS GAIN IN DELIVERIES.

The third quarter's growth in kerosine jet fuel deliveries, down to 3.1 percent from the first half's 6 percent rise, mostly reflects the slowing in air traffic gains in the most recent months of this year. During the first half, about 8 percent more miles were flown than in the first six months of 1986; the third quarter's increase is estimated to be only about 5

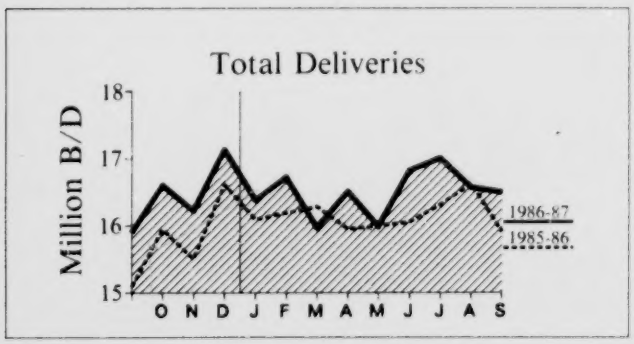
Other Oils

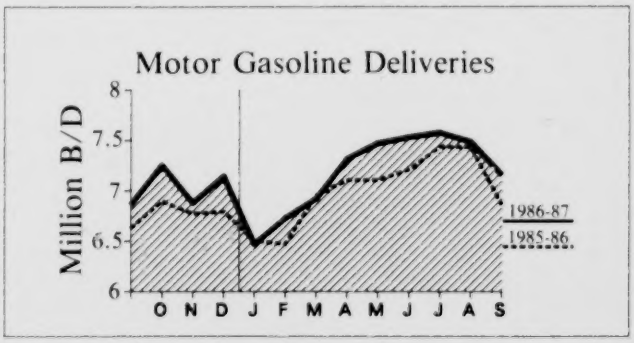
DELIVERIES SHOW CONTINUED STRENGTH IN THIRD QUARTER.

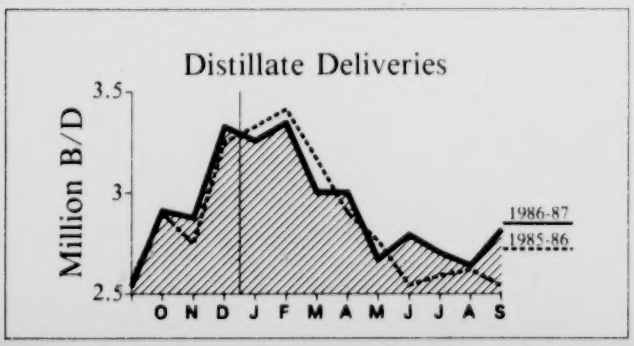
Products supplied in the other oils category for September are estimated to be 4,184 thousand B/D, up 4.5 percent from last month's estimate of 4,003 thousand B/D but slightly lower than the revised EIA estimate of 4,195 thousand B/D for September 1986. In particular, the petrochemical feedstock markets have recovered significantly from the weak August deliveries, led by advances in the olefin and naphtha markets. However, lower summer harvests slightly reduced the use of propane as a crop-drying fuel, especially in the tobacco industry. In other markets, the asphalt and road oil group, having displayed unusual volatility earlier in the year due to delays in passage of the Federal highway bill, appears to have settled into a more normal pattern for this time of year, contributing to the upward trend. Consistent with seasonal patterns, estimates of refinery gas production are slightly lower than for August as a result of a decline in gasoline production.

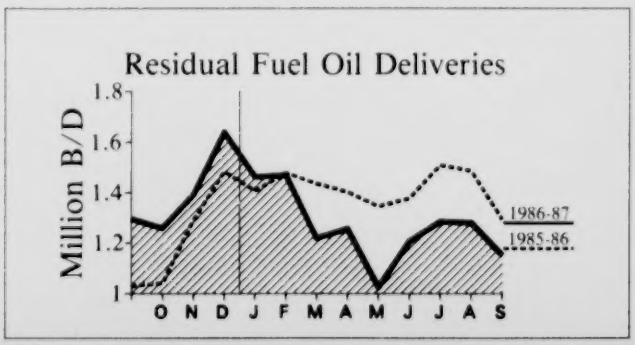
As in the previous month, the apparent year-to-year decline in September deliveries of other oils is largely attributable to last year's unusually high estimates for many of the products in this category, especially refinery gas. A correction for these aberrations would have resulted in a year-to-year increase of approximately 2-3 percent, more in line with the third quarter and year-to-date results.

The third quarter results reflect continued strength in deliveries of products in the other oils category. Average









deliveries for the quarter are estimated to be 4,154 thousand B/D, which represents a 5.5 percent increase over the 3,939 thousand B/D now estimated for the second quarter as well as a 3.2 percent increase from the 4,027 thousand B/D of the third quarter of 1986. Despite the volatility in key products such as refinery gas and asphalt and road oil, the results indicate that deliveries of products in the other oils category this year are continuing to grow at rates significantly higher than that of the major petroleum products.

SUPPLY [1/]

Production

PRODUCTION DOWN DESPITE SOME REVIVAL IN ACTIVITY. Domestic crude oil production continued to decline in the third quarter. Based on data from API member companies, nonmembers, and state agencies, the quarter's production is estimated to have averaged less than 8.2 million B/D, another new quarterly low for the past ten years. That lower 48 production has continued to decline—down to 6.2 million B/D for the quarter from close to 7.3 million B/D early last year—indicates that the recent partial revival in drilling and well servicing has been well below levels needed to slow the decline in domestic production. Rig activity, though up by roughly half from earlier this year, is still down by over 40 percent from its level of two years ago. Well servicing, necessary to slow the production decline of the over-one-half-million producing oil wells in the U.S., recently jumped by over 30 percent from year-ago-levels — but the gain was only about half of what would have been needed to return to the level of well servicing of two years ago.

Imports

MONTH SLIPS BUT QUARTER SETS RECENT-YEAR HIGH. Imports in September slipped somewhat from the recent-year highs of the previous two months, and compared with last September's unusually high levels, actually declined slightly year to year. However, the month's 6.9 million B/D of imports was still strong by any other measure, up by over 40 percent, for example, from September levels of two years ago; September's imports helped to bring the total for the quarter to the highest level since 1980. Roughly 200 thousand B/D of the quarter's imports went towards inventory building at close to twice the seasonal norm, but by far the bulk went towards meeting current demand and replacing lost domestic production.

Product imports continue to show more strength for light products than for heavy. Imports of gasoline and components, slipping from August's high level, still rose 96 thousand B/D, or 25.5 percent, over last September to 472 thousand B/D. Distillate imports were also up 55 thousand B/D but residual fuel oil experienced a 145 thousand B/D decline.

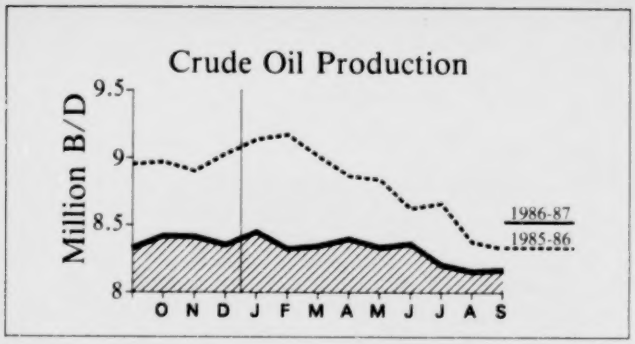
Refinery Operations

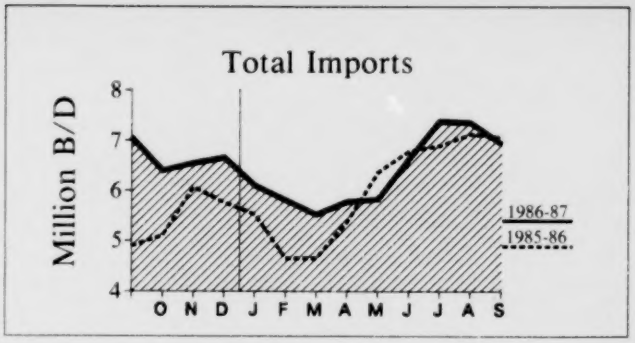
ACTIVITY CONTINUES TO EXCEED YEAR AGO. The slippage in imports in September from the level of the prior two months was paralleled in refinery activity for the month. Input to distillation units was down roughly 250 thousand B/D from the July-August average, but still exceeded last September's by about 110 thousand B/D or close to 1 percent. Gasoline yields recovered somewhat from the below-average levels of the past several months, with production almost equalling the 6.9 million B/D of a year ago. Largely because last year's distillate production was unusually strong—rising almost 9 percent for last year's third quarter despite only slight growth in demand—this year's production continues to show year-to-year declines, including the nearly 2 percent decrease for September to 2.7 million B/D. Residual fuel oil production, however, rose versus last September by 2 percent to about 870 thousand B/D.

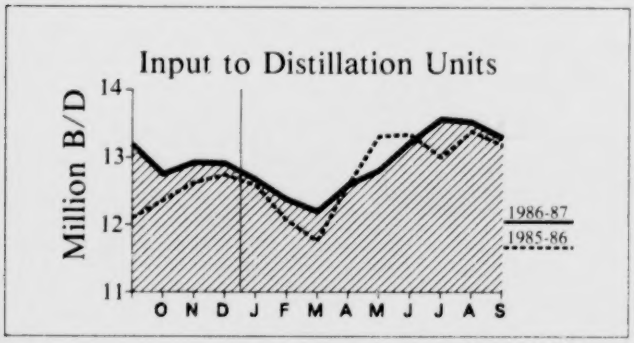
Inventories

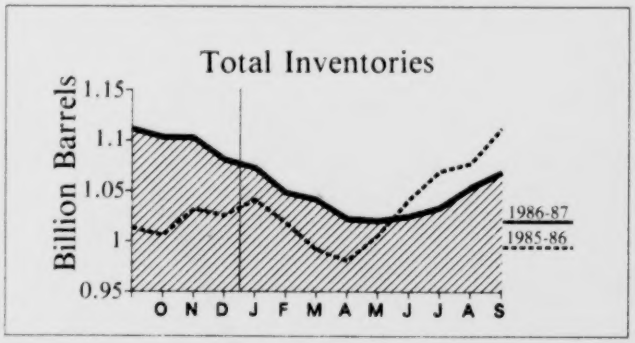
SEPTEMBER'S RISE NORMAL BUT QUARTER EXPERIENCES BUILD. Total inventories rose 15 million barrels in September, roughly in line with the average increase of the previous five years—but in contrast with recent stockbuilding which brought the rise for the quarter to nearly twice the historical average. Crude oil stocks remained in the 330 to 340 million barrel range they have maintained for much of the past two years. Gasoline and distillate stocks' respective 4 million and 5 million barrel increases were also roughly in line with typical seasonal patterns.

Though last September, distillates stocks were 24 million barrels higher than this September because of an increase in refinery output well above the increase in demand, stocks this September still exceeded those of two years ago by 11 million barrels. In any event, inventories typically provide only a small portion of the heating season's supplies. For last season, less than 8 percent of October-through-March deliveries were supplied from inventories; 87 percent came from current refinery production, and the remainder from net imports. With refinery capacity up slightly from last year and product imports continuing to be available, the availability of distillate supplies from refineries, imports, and inventories appears adequate to meet likely ranges of demand this season, even should weather be colder than normal.









1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 534 million barrels as of September 30, 1987).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	SEPTEMBER			YEAR-TO-DATE		
	1987[1]	1986[2]	% Change	1987[3R]	1986[2]	% Change
Products Supplied:						
Total motor gasoline	7,159	6,864	4.3	7,190	7,014	2.5
Finished leaded motor gasoline*	1,612	2,051	(21.4)	1,783	2,232	(20.1)
Finished unleaded motor gasoline*	5,547	4,813	15.3	5,407	4,782	13.1
Naphtha-jet	217	199	9.0	208	200	4.0
Kerosine-jet	1,180	1,122	5.2	1,142	1,087	5.1
Distillate fuel oil	2,817	2,540	10.9	2,913	2,872	1.4
Residual fuel oil	1,153	1,296	(11.0)	1,262	1,415	(10.8)
All other oils[4]	4,184	4,195	(0.3)	4,020	3,872	3.8
Reclassified[5]	- 219	- 307	(28.7)	- 240	- 306	(21.6)
Total domestic products supplied	16,491	15,909	3.7	16,495	16,154	2.1
Exports	670	714	(6.2)	746	771	(3.2)
Total products supplied	17,161	16,623	3.2	17,241	16,925	1.9
Supply:						
Domestic production:						
Crude oil[6]	8,084	8,328	(2.9)	8,285	8,776	(5.6)
Natural gas liquids	1,600	1,468	9.0	1,597	1,555	2.7
Other supply[7]	1,046	927	12.8	936	854	9.6
Total domestic supply	10,730	10,723	0.1	10,818	11,185	(3.3)
Imports:						
Crude oil, total	4,936[10/]	4,984[10/]	(1.0)	4,476[10/]	4,026[10/]	11.2
Canadian	678	573	18.3	625	560	11.6
Other	4,258	4,411	(3.5)	3,851	3,466	11.1
Products, total	1,996	2,059	(3.1)	1,901	2,030	(6.4)
Residual fuel oil	496	641	(22.6)	560	656	(14.6)
Other	1,500	1,418	5.8	1,341	1,374	(2.4)
Total imports	6,932	7,043	(1.6)	6,377	6,056	5.3
Total supply	17,662	17,766	(0.6)	17,195	17,241	(0.3)
Stock change, all oils	+ 501	+1,143	XXXX	- 46	+ 316	XXXX
Refinery Operations						
Input to crude oil distillation units	13,303	13,191	0.8	12,927	12,813	0.9
Operable capacity	15,692	15,435	1.7	15,667	15,466	1.3
Refinery utilization (%)[8]	84.8%	85.5%	(0.8)	82.5%	82.8%	(0.4)
Crude oil runs	13,216	13,097	0.9	12,822	12,705	0.9

Stocks (millions bbls.)	1987		1986[2]	% Change from ...	
	Sep. 30[9]	Aug. 31[9]	Sep. 30	Previous Month	Year Ago
Crude oil [10/]	334.3	333.2r/	337.8	0.3	(1.0)
Unfinished oils	103.3	103.9r/	95.1	(0.6)	8.6
Total motor gasoline**	228.8	224.9r/	233.9	1.7	(2.2)
Finished leaded motor gasoline*	54.7	53.4r/	69.9	2.4	(21.7)
Finished unleaded motor gasoline*	134.8	133.3r/	126.1	1.1	6.9
Naphtha-jet	6.5	6.8	6.7	(4.4)	(3.0)
Kerosine-jet	43.2	40.9	42.2	5.6	2.4
Distillate fuel oil	128.6	123.3r/	152.4	4.3	(15.6)
Residual fuel oil	45.1	42.8	44.0	5.4	2.5
All other oils	178.7	177.7r/	199.5	0.6	(10.4)
Total all oils	1,068.5	1,053.5r/	1,111.6	1.4	(3.9)

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-July, U.S. Department of Energy, August-September, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	3rd QUARTER		
	1987[1]	1986[2]	% Change
Products Supplied:			
Total motor gasoline	7,418	7,249	2.3
Finished leaded motor gasoline*	1,721	2,202	(21.8)
Finished unleaded motor gasoline*	5,697	5,047	12.9
Naphtha-jet	229	208	10.1
Kerosine-jet	1,160	1,125	3.1
Distillate fuel oil	2,725	2,585	5.4
Residual fuel oil	1,244	1,431	(13.1)
All other oils[3]	4,154	4,027	3.2
Reclassified[4]	- 222	- 343	(35.3)
Total domestic products supplied	16,708	16,282	2.6
Exports	669	756	(11.5)
Total products supplied	17,377	17,038	2.0
Supply:			
Domestic production:			
Crude oil[5]	8,154	8,455	(3.6)
Natural gas liquids	1,591	1,474	7.9
Other supply[6]	881	860	2.4
Total domestic supply	10,626	10,789	(1.5)
Imports:			
Crude oil, total	5,172 9/	4,820 9/	7.3
Canadian	678	568	19.4
Other	4,494	4,252	5.7
Products, total	2,065	2,196	(6.0)
Residual fuel oil	565	703	(19.6)
Other	1,500	1,493	0.5
Total imports	7,237	7,016	3.1
Total supply	17,863	17,805	0.3
Stock change, all oils	+ 486	+ 767	XXXX
Refinery Operations			
Input to crude oil distillation units	13,471	13,197	2.1
Operable capacity	15,696	15,447	1.6
Refinery utilization (%)[7]	85.8%	85.4%	0.5
Crude oil runs	13,346	13,100	1.9

Stocks (millions bbls.)	3rd QUARTER		
	1987[8]	1986[2]	% Change
Crude oil	334.3 9/	337.8 9/	(1.0)
Unfinished oils	103.3	95.1	8.6
Total motor gasoline**	228.8	233.9	(2.2)
Finished leaded motor gasoline*	54.7	69.9	(21.7)
Finished unleaded motor gasoline*	134.8	126.1	6.9
Naphtha-jet	6.5	6.7	(3.0)
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